

IN THE CLAIMS:

Please amend the claims as follows:

1-22. (Cancelled)

23. (New) A process for production of trialkoxyhalosilanes, which comprises reacting a tetrahalosilane represented by Formula 1 with a tetraalkoxysilane represented by Formula 2 in the mixture of an alcohol composed of the same alkoxy group as that of the tetraalkoxysilane to yield a trialkoxyhalosilane represented by Formula 3, wherein the alcohol is used in an amount of 5-50 % by mol based on a total amount of Si in the tetrahalosilane and the tetraalkoxysilane:

[Formula 1]



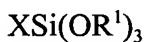
(where X denotes halogen)

[Formula 2]



(where R¹ denotes a hydrocarbon group having 1-6 carbon atoms)

[Formula 3]



(where X denotes halogen; and R¹ a hydrocarbon group having 1-6 carbon atoms).

24. (New) The process for production of trialkoxyhalosilanes according to claim 23, wherein a molar quantity of the tetraalkoxysilane in use is more than three times the molar quantity of the tetrahalosilane in use.

25. (New) The process for production of trialkoxyhalosilanes according to claim 23, wherein X is chlor and R¹ is ethyl in the compound represented by Formulae 1-3.

26. (New) The process for production of trialkoxyhalosilanes according to claim 24, wherein X is chlor and R¹ is ethyl in the compound represented by Formulae 1-3.

27. (New) A process for production of trialkoxyhalosilanes, which comprises reacting a tetrahalosilane represented by Formula 4 with an alcohol represented by Formula 5 at a controlled temperature of 40 °C or below to yield a trialkoxyhalosilane represented by Formula 6:

[Formula 4]



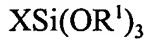
(where X denotes halogen)

[Formula 5]



(where R¹ denotes a hydrocarbon group having 1-6 carbon atoms)

[Formula 6]



(where X denotes halogen; and R¹ a hydrocarbon group having 1-6 carbon atoms).

28. (New) The process for production of trialkoxyhalosilanes according to claim 27, wherein the reaction of the tetrahalosilane with the alcohol is performed in the presence of an acid catalyst.

29. (New) The process for production of trialkoxyhalosilanes according to claim 28, wherein the acid catalyst is a hydrogen halide secondarily produced in the reaction.

30. (New) The process for production of trialkoxyhalosilanes according to claim 27, wherein X is chlor and R¹ is ethyl in the compound represented by Formulae 4-6.

31. (New) The process for production of trialkoxyhalosilanes according to claim 28, wherein X is chlor and R¹ is ethyl in the compound represented by Formulae 4-6.

32. (New) The process for production of trialkoxyhalosilanes according to claim 29, wherein X is chlor and R¹ is ethyl in the compound represented by Formulae 4-6.

33. (New) A process for production of trialkoxy(dialkylamino) silanes, which comprises a first step including the process for production of trialkoxyhalosilanes according to claim 23; and a second step of reacting the trialkoxy halosilane obtained in the first step with a dialkylamine represented by Formula 7 to yield a trialkoxy(dialkylamino) silane represented by Formula 8:

[Formula 7]



(where R² denotes a hydrocarbon group having 1-12 carbon atoms; and R³ a hydrocarbon group having 1-12 carbon atoms)

[Formula 8]



(where R¹ denotes a hydrocarbon group having 1-6 carbon atoms; R² a hydrocarbon group having 1-12 carbon atoms; and R³ a hydrocarbon group having 1-12 carbon atoms).

34. (New) The process for production of trialkoxy(dialkylamino) silanes according to claim 33, wherein the reacted mixture obtained in the first step is reacted with the dialkylamine represented by Formula 7, without subjecting to isolation/ purification.

35. (New) The process for production of trialkoxy(dialkylamino) silanes according to claim 33, wherein X is chlor and R¹, R² and R³ are ethyl in the compound represented by Formulae 1-8.

36. (New) The process for production of trialkoxy(dialkylamino) silanes according to claim 34, wherein X is chlor and R¹, R² and R³ are ethyl in the compound represented by Formulae 1-8.

37. (New) A catalyst component for polymerization or copolymerization catalysts of α -olefins, which comprises a mixture of silane compounds represented by Formulae 9 and 10:

[Formula 9]



(where R¹ denotes a hydrocarbon group having 2-6 carbon atoms; and R² a hydrocarbon group

having 1-12 carbon atoms, an amino group including a hydrogen atom and a hydrocarbon group having 1-12 carbon atoms, which are bonded on a N atom, or an amino group including two hydrocarbon groups each having 1-12 carbon atoms, which are bonded on a N atom (the two hydrocarbon groups may be the same or different from each other))

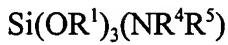
[Formula 10]



(where R^3 denotes an alkoxy group having 1-6 carbon atoms, a hydrocarbon group having 1-12 carbon atoms, an amino group including a hydrogen atom and a hydrocarbon group having 1-12 carbon atoms, which are bonded on a N atom, or an amino group including two hydrocarbon groups each having 1-12 carbon atoms, which are bonded on a N atom (the two hydrocarbon groups may be the same or different from each other). Each R^3 may be the same as or different from another. Formulae 9 and 10 do not represent the same compound).

38. (New) A catalyst component for polymerization or copolymerization catalysts of α -olefins, which comprises a mixture of silane compounds represented by Formulae 11 and 12:

[Formula 11]



(where R^1 denotes a hydrocarbon group having 2-6 carbon atoms; R^4 a hydrocarbon group having 1-12 carbon atoms, or a hydrogen atom; and R^5 a hydrocarbon group having 1-12 carbon atoms)

[Formula 12]



(where R^6 denotes a hydrocarbon group having 1-12 carbon atoms or an alkoxy group having 1-6

carbon atoms (each R⁶ may be the same as or different from another); R⁷ a hydrocarbon group having 1-12 carbon atoms; R⁸ a hydrocarbon group having 1-12 carbon atoms; and n is equal to 1-2 or 4).

39. (New) The catalyst component for polymerization or copolymerization catalysts of α -olefins according to claim 37, wherein the silane compound represented by Formulae 9-12 is obtained by reacting a tetrahalosilane represented by Formula 13 with a tetraalkoxysilane represented by Formula 14 to yield a trialkoxyhalosilane represented by Formula 15, which is then reacted with a dialkylamine represented by Formula 16:

[Formula 13]



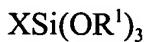
(where X denotes halogen)

[Formula 14]



(where R¹ denotes a hydrocarbon group having 2-6 carbon atoms)

[Formula 15]



(where X denotes halogen; and R¹ a hydrocarbon group having 2-6 carbon atoms)

[Formula 16]



(where R² denotes a hydrocarbon group having 1-12 carbon atoms; and R³ a hydrocarbon group having 1-12 carbon atoms).

40. (New) The catalyst component for polymerization or copolymerization catalysts of α -olefins according to claim 38, wherein the silane compound represented by Formulae 9-12 is obtained by reacting a tetrahalosilane represented by Formula 13 with a tetraalkoxysilane represented by Formula 14 to yield a trialkoxyhalosilane represented by Formula 15, which is then reacted with a dialkylamine represented by Formula 16:

[Formula 13]



(where X denotes halogen)

[Formula 14]



(where R¹ denotes a hydrocarbon group having 2-6 carbon atoms)

[Formula 15]



(where X denotes halogen; and R¹ a hydrocarbon group having 2-6 carbon atoms)

[Formula 16]



(where R² denotes a hydrocarbon group having 1-12 carbon atoms; and R³ a hydrocarbon group having 1-12 carbon atoms).

41. (New) A catalyst component for polymerization or copolymerization catalysts of α -olefins, which comprises a mixture of a diethylaminotriethoxysilane and a bis(diethylamino)diethoxysilane.

42. (New) A polymerization or copolymerization catalyst of α -olefins, which includes the catalyst component according to claim 37.

43. (New) A polymerization or copolymerization catalyst of α -olefins, which includes the catalyst component according to claim 38.

44. (New) A polymerization or copolymerization catalyst of α -olefins, which includes the catalyst component according to claim 39.

45. (New) A polymerization or copolymerization catalyst of α -olefins, which includes the catalyst component according to claim 40.

46. (New) A polymerization or copolymerization catalyst of α -olefins, which includes the catalyst component according to claim 41.

47. (New) A polymerization or copolymerization catalyst of α -olefins, which comprises [A] a solid catalyst component essentially including magnesium, titanium, a halogen element and an electron donor; [B] an organoaluminum compound component; and [C] the catalyst component according to claim 37.

48. (New) A polymerization or copolymerization catalyst of α -olefins, which comprises [A] a solid catalyst component essentially including magnesium, titanium, a halogen element and an

electron donor; [B] an organoaluminum compound component; and [C] the catalyst component according to claim 38.

49. (New) A polymerization or copolymerization catalyst of α -olefins, which comprises [A] a solid catalyst component essentially including magnesium, titanium, a halogen element and an electron donor; [B] an organoaluminum compound component; and [C] the catalyst component according to claim 39.

50. (New) A polymerization or copolymerization catalyst of α -olefins, which comprises [A] a solid catalyst component essentially including magnesium, titanium, a halogen element and an electron donor; [B] an organoaluminum compound component; and [C] the catalyst component according to claim 40.

51. (New) A polymerization or copolymerization catalyst of α -olefins, which comprises [A] a solid catalyst component essentially including magnesium, titanium, a halogen element and an electron donor; [B] an organoaluminum compound component; and [C] the catalyst component according to claim 41.

52. (New) A process for polymerization of α -olefins, which comprises polymerizing or copolymerizing an α -olefin in the presence of the catalyst according to claim 42.

53. (New) A process for polymerization of α -olefins, which comprises polymerizing or copolymerizing an α -olefin in the presence of the catalyst according to claim 43.

54. (New) A process for polymerization of α -olefins, which comprises polymerizing or copolymerizing an α -olefin in the presence of the catalyst according to claim 44.

55. (New) A process for polymerization of α -olefins, which comprises polymerizing or copolymerizing an α -olefin in the presence of the catalyst according to claim 45.

56. (New) A process for polymerization of α -olefins, which comprises polymerizing or copolymerizing an α -olefin in the presence of the catalyst according to claim 46.

57. (New) A process for polymerization of α -olefins, which comprises polymerizing or copolymerizing an α -olefin in the presence of the catalyst according to claim 47.

58. (New) A process for polymerization of α -olefins, which comprises polymerizing or copolymerizing an α -olefin in the presence of the catalyst according to claim 48.

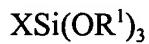
59. (New) A process for polymerization of α -olefins, which comprises polymerizing or copolymerizing an α -olefin in the presence of the catalyst according to claim 49.

60. (New) A process for polymerization of α -olefins, which comprises polymerizing or copolymerizing an α -olefin in the presence of the catalyst according to claim 50.

61. (New) A process for polymerization of α -olefins, which comprises polymerizing or copolymerizing an α -olefin in the presence of the catalyst according to claim 51.

62. (New) A catalyst component for polymerization or copolymerization catalysts of α -olefins, which comprises a reacted mixture of a trialkoxyhalosilane represented by Formula 17 with a dialkylamine represented by Formula 18:

[Formula 17]



(where X denotes halogen; and R¹ denotes a hydrocarbon group having 2-6 carbon atoms)

[Formula 18]



(where R² denotes a hydrocarbon group having 1-12 carbon atoms; and R³ a hydrocarbon group having 1-12 carbon atoms).

63. (New) A polymerization or copolymerization catalyst of α -olefins, which includes the catalyst component according to claim 62.

64. (New) A polymerization or copolymerization catalyst of α -olefins, which comprises [A] a solid catalyst component essentially including magnesium, titanium, a halogen element and an electron donor; [B] an organoaluminum compound component; and [C] the catalyst component according to claim 62.

65. (New) The polymerization or copolymerization catalyst of α -olefins according to claim 63, wherein the reacted mixture of the trialkoxyhalosilane represented by Formula 17 with the dialkylamine represented by Formula 18 is employed without subjecting to isolation/purification.

66. (New) The polymerization or copolymerization catalyst of α -olefins according to claim 64, wherein the reacted mixture of the trialkoxyhalosilane represented by Formula 17 with the dialkylamine represented by Formula 18 is employed without subjecting to isolation/purification.

67. (New) A process for polymerization of α -olefins, which comprises polymerizing or copolymerizing an α -olefin in the presence of the catalyst according to claim 63.

68. (New) A process for polymerization of α -olefins, which comprises polymerizing or copolymerizing an α -olefin in the presence of the catalyst according to claim 64.

69. (New) A process for polymerization of α -olefins, which comprises polymerizing or copolymerizing an α -olefin in the presence of the catalyst according to claim 65.

REMARKS

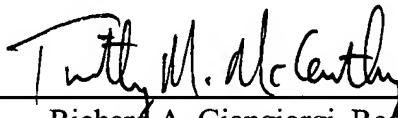
Applicant has amended the claims in order to place this application in better condition for examination. As Applicant is not aware of any prior art which would anticipate or would render obvious the claims defining the present invention, early allowance is respectfully requested.

Should the Examiner have any questions regarding this Amendment, the Examiner is invited to contact one of the undersigned attorneys at (312) 704-1890.

Respectfully submitted,

Date: January 18, 2006

By:



Richard A. Giangiorgi, Reg. No. 24, 284
Timothy M. McCarthy, Reg. No. 42,855
Trexler, Bushnell, Giangiorgi,
Blackstone & Marr, Ltd.
105 W. Adams St., 36th Floor
Chicago, IL 60603
Tel.: (312) 704-1890

915353.WPD